framed of the weather at all stations on any day of 1884, showing the quantity and nature of the rainfall, thunder, fog, dew, frost, transparency of the air, "sun-snake" (a phenomenon chiefly observed in the northern part of Sweden), aurora borealis, &c. Reports on the forming and breaking up of the ice have been received from fifty-eight stations, besides seventy-seven observations of periodical features of animal and vegetable nature.

THE Swedish Academy of Sciences has issued a work entitled "The Correspondence of Carl von Linnæus," containing a record of all the correspondents of this famous naturalist, Swedish as well as foreign, with their addresses, date of birth and death, &c., as well as the date of each letter to and from.

THE first African city lighted by electricity was not Algiers or Cairo, but Kimberley, with forty-two Brush lamps, each of 2000 candle-power. The current is also utilised there for the killing of dogs, a step suggesting the execution of death sentences by the same means, as proposed in America and in France by M. Charson, a member of the Senate.

Mr. R. N. Cust, the Secretary to the Royal Asiatic Society, is engaged on a work on the languages of the tribes of Polynesia, including those of Australia.

The additions to the Zoological Society's Gardens during the past week include a Squirrel Monkey (Chrysothrix sciurea &) from Guiana, presented by Madam G. Sangiorgi; a Macaque Monkey (Macacus cynomolgus ?) from India, presented by Mr. D. Evans; a Rhesus Monkey (Macacus rhesus ?) from India, presented by Capt. Pitman; a Common Cormorant (Phalacrocorax carbo), British, presented by Mr. O. Moulton Barrett; two Golden Eagles (Aquila chrysaetus) from Scotland, a Lined Finch (Spermophila lineola) from South America, deposited; two Ostriches (Struthio camelus & ?) from North Africa; a Lear's Macaw (Ara leari) from South America; a Lineolated Parrakeet (Bolborhynchus lineolatus) from Mexico, purchased; a Bennett's Wallaby (Halmaturus bennetti ?), a Vulpine Phalanger (Phalangista vulpina &), three Canadian Beavers (Castor canadensis), born in the Gardens.

## OUR ASTRONOMICAL COLUMN

THE STRASBURG OBSERVATORY .- Herr W. Schur has published, in No. 2736 of the Astronomische Nachrichten, a supplementary report on the work done at the Strasburg Observatory during the ten months preceding May of this year, so as to exhibit the state of the instruments and of the computations relating to the observations made with them on the eve of his departure for Göttingen, where he has been appointed Director in the room of the late Prof. Klinkersues. During the interval to which the report refers, Herr Schur was chiefly occupied with observations of the moon with the altazimuth and of comets with the great refractor, also with the examination of the micro-meter-screw of the latter instrument. The meridian-circle has chiefly been employed in the observation of southern starsamongst others the eighty-three stars of Auwers' Southern Fundamental Catalogue, and certain stars for investigating astronomical refractions. The direct and reflection observations to the end of the preceding year give for the geographical latitude of the meridian-circle, +48° 35′ 0″·II, which agrees well with a former determination with Repsold's transit, using Horrobow's method, viz. +48° 35′ 0″ 23. In former reports Herr Schur has drawn attention to the discordance between the nadir points determined with observer north and observer south, which, for his observations, amounts to a considerable quantity; in the mean, from a large number of observations, \( \frac{1}{2} \) (northsouth) being as much as +0".50. This large value agrees both in sign and in magnitude with the quantity determined from observations of zenith stars for similar positions of the observer, viz. 0" 77, and Herr Schur concludes that his observed zenith distances of stars require a correction of about -o''. In the case of the other Strasburg observers, the corresponding correction is comparatively insignificant. Herr Schur's successor at Strasburg is Dr. Kobold.

# ASTRONOMICAL PHENOMENA FOR THE WEEK 1886 JULY 18-24

(FOR the reckoning of time the civil day, commencing at Greenwich mean midnight, counting the hours on to 24, is here employed.)

### At Greenwich on July 18

Sun rises, 4h. 6m.; souths, 12h. 5m. 56 5s.; sets, 20h. 6m.; decl. on meridian, 21° 1' N.: Sidereal Time at Sunset, 15h. 52m.

Moon (two days after Full) rises, 20h. 42m.\*; souths, 1h. 31m.; sets, 6h. 27m.; decl. on meridian, 14° 5' S.

6 41	13 54 21 7	13 21 N.
і 33	9 38 17 43	21 46 N.
11 3	16 48 23 33	3 38 S.
10 9	16 18 22 27	o 58 N.
	h. m. 6 41 I 33 II 3 IO 9	Rises h. m. h. m. h. m. 6 41 13 54 21 7 1 33 9 38 17 43 11 3 16 48 23 33 10 9 16 18 22 27 3 7 11 15 19 23

\* Indicates that the rising is that of the preceding evening.

Occultations of Stars by the Moon (visible at Greenwich)

July	Star	Mag.	Disap.	Reap.	Corresponding angles from ver- tex to right for inverted image	
19	e² Aquarii e¹ Aquarii μ Ceti	6	4 I 23 32	near approa near approa o 24†	ach 220 —	
† Occurs on the following morning.						
Inly	h.					

19 ... Mercury at greatest elongation from the Sun, 27° east.

#### Variable Stars

Star	R.A.	Decl.					
	h. m.	.0 /	h. m.				
U Cephei	0 52 2	Decl. 81 16 N July	18, 23 32 m				
•		,,	23, 23 II m				
R Piscium	1 24.8	2 18 N ,,	23, M				
S Ursæ Majoris	12 39'0	61 43 N ,,	24, M				
V Bootis	14 25'2		22, M				
U Coronæ	15 13'6		21, 22 22 m				
U Ophiuchi	17 10.8	1 20 N ,,	22, 2 58 m				
-		,,	22, 23 6 m				
X Sagittarii	17 40'4	27 47 S. July					
U Sagittarii	18 25.2	19 12 S ,,	19, 2 o M				
S Vulpeculæ	19 43'7	27 o N ,,	24, m				
χ Cygni	19 46.2	32 38 N ,,	18, <i>m</i>				
S Delphini	20 37.8		22, M				
δ Cephei	22 24 9	57 50 N ,,	18, 21 30 m				
M signifies maximum; m minimum.							

#### Meteor Showers

Meteors begin to be somewhat numerous in the latter half of the present month. Amongst the radiants represented are the following:—Near  $\pi$  Andromedæ, R.A. 10°, Decl. 38° N.; near  $\theta$  Cassiopeiæ, R.A. 6°, Decl. 58° N.; near  $\eta$  Draconis, R.A. 245°, Decl. 64° N.; near  $\sigma$  Serpentis, R.A. 266°, Decl. 12° S.; near  $\alpha$  Cygni, R.A. 312°, Decl. 46° N.; from Lacerta, R.A. 342°, Decl. 40° N.; and the great *Perceid* shower, maximum August 10, radiant R.A. 45°, Decl. 56° N., begins to furnish individual meteors about this time.

#### GEOGRAPHICAL NOTES

According to the *Colonies and India*, the Secretary of the Victorian branch of the Geographical Society of Australasia has written to the Royal Society of Victoria asking the latter to appoint a committee to confer with that already appointed by the former Society on the question of sending an exploring expedition to the Antarctic regions. It is urged that a conference should take place as soon as possible, and that various scientific associations should be invited to co-operate in sending out one or more expeditions.

THE latest news from the Chitral Mission is that Col. Lock-hart is returning to India from Zebah, in Badakshan, leaving Col. Woodthorpe in charge of the party.

It is stated that Mr. A. R. Colquhoun, who is at present Civil Commissioner at Mogoung, in Upper Burmah, is about to start